10.   (New) The method of claim 1, further comprising updating at least a portion of the state of the processing group after the joining.

11.   (New) The method of claim 10, wherein the updating at least a portion of the state of the processing group after the joining comprises updating the sequence number of the processing group.

12.   (New) The system of claim 3, wherein the means for comparing comprises means for comparing a sequence number of the prospective member with a sequence number of the processing group.

13.   (New) The system of claim 12, wherein the sequence number of the prospective member is less than the sequence number of the processing group, and wherein the means for updating comprises means for updating the sequence number of the prospective member with the sequence number of the processing group.

14.   (New) The system of claim 13, further comprising means for determining an activity status of the processing group prior to the updating, wherein the means for updating the sequence number of the prospective member comprises means for updating the sequence number of the prospective member if the processing group is active.

15.   (New) The system of claim 3, further comprising means for updating at least a portion of the state of the processing group after the joining.

16.   (New) The system of claim 15, wherein the means for updating at least a portion of the state of the processing group after the joining comprises means for updating the sequence number of the processing group.

17.   (New) The at least one program storage device of claim 5, wherein the comparing comprises comparing a sequence number of the prospective member with a sequence number of the processing group.

18.   (New) The at least one program storage device of claim 17, wherein the sequence number of the prospective member is less than the sequence number of the processing group, and wherein the updating comprises updating the sequence number of the prospective member with the sequence number of the processing group.

19.   (New) The at least one program storage device of claim 18, further comprising determining an activity status of the processing group prior to the updating, wherein updating the sequence number of the prospective member comprises updating if the processing group is active.

20.   (New) The at least one program storage device of claim 5, further comprising updating at least a portion of the state of the processing group after the joining.

21.   (New) The at least one program storage device of claim 20, wherein the updating at least a portion of the state of the processing group after the joining comprises updating the sequence number of the processing group.

22.   (New) A method of managing processing groups of a distributed computing environment, the method comprising:

        detecting a failure of at least one member of a processing group;

        quiescing activity to a group state of the processing group; and

        updating at least a portion of the group state in order to exclude the at least one member of the processing group.

23.   (New) The method of claim 22, wherein the quiescing and updating are performed if the processing group is active and the at least one member of the processing group comprises less than a majority of the processing group.

24.   (New) A system of managing processing groups of a distributed computing environment, the system comprising:

means for detecting a failure of at least one member of a processing group;

means for quiescing activity to a group state of the processing group; and

means for updating at least a portion of the group state in order to exclude the at least one member of the processing group.

25.   (New) The system of claim 24, wherein the means for quiescing and means for updating are performed if the processing group is active and the at least one member of the processing group comprises less than a majority of the processing group.

26.   (New) At least one program storage device readable by a machine tangibly embodying at least one program of instructions executable by the machine to perform a method of managing processing groups of a distributed computing environment, the method comprising:

detecting a failure of at least one member of a processing group;

quiescing activity to a group state of the processing group; and

updating at least a portion of the group state in order to exclude the at least one member of the processing group.

27.   (New) The at least one program storage device of claim 26, wherein the quiescing and updating are performed if the processing group is active and the at least one member of the processing group comprises less than a majority of the processing group.

28.   (New) A method of managing processing groups of a distributed computing environment, the method comprising:

joining a prospective member to an inactive processing group;

comparing at least a portion of a state of the prospective member with at least a portion of a group state of the processing group; and

updating the at least a portion of the group state.

29. (New) The method of claim 28, wherein the comparing comprises comparing a sequence number of the prospective member with a sequence number of the group state.

30. (New) The method of claim 29, wherein the updating comprises updating the sequence number of the group state with the sequence number of the prospective member if the sequence number of the prospective member is smaller than the sequence number of the group state.

31. (New) The method of claim 29, wherein the updating comprises updating the sequence number of the group state with a highest sequence number of the members of the processing group if a quorum of the processing group exists.

32. (New) The method of claim 28, further comprising activating the processing group.

33. (New) The method of claim 32, wherein the activating comprises updating a local copy of the group state for any member of the processing group whose sequence number is less than a current sequence number of the processing group.

34. (New) The method of claim 33, wherein the activating further comprises changing the group state to active if a majority of the members of the processing group have a sequence number matching the current sequence number and none of the members has aborted.

35.   (New) A system of managing processing groups of a distributed computing environment, the system comprising:

means for joining a prospective member to an inactive processing group;

means for comparing at least a portion of a state of the prospective member with at least a portion of a group state of the processing group; and

means for updating the at least a portion of the group state.

36.   (New) The system of claim 35, wherein the means for comparing comprises means for comparing a sequence number of the prospective member with a sequence number of the group state.

37.   (New) The system of claim 36, wherein the means for updating comprises means for updating the sequence number of the group state with the sequence number of the prospective member if the sequence number of the prospective member is smaller than the sequence number of the group state.

38.   (New) The system of claim 36, wherein the means for updating comprises means for updating the sequence number of the group state with a highest sequence number of the members of the processing group if a quorum of the processing group exists.

39.   (New) The system of claim 35, further comprising means for activating the processing group.

40.   (New) The system of claim 39, wherein the means for activating comprises means for updating a local copy of the group state for any member of the processing group whose sequence number is less than a current sequence number of the processing group.

41.   (New) The system of claim 40, wherein the means for activating further comprises means for changing the group state to active if a majority of the members of the

processing group have a sequence number matching the current sequence number and none of the members has aborted.

42.   (New) At least one program storage device readable by a machine tangibly embodying at least one program of instructions executable by the machine to perform a method of managing processing groups of a distributed computing environment, the method comprising:

joining a prospective member to an inactive processing group;

comparing at least a portion of a state of the prospective member with at least a portion of a group state of the processing group; and

updating the at least a portion of the group state.

43.   (New) The at least one program storage device of claim 42, wherein the comparing comprises comparing a sequence number of the prospective member with a sequence number of the group state.

44.   (New) The at least one program storage device of claim 43, wherein the updating comprises updating the sequence number of the group state with the sequence number of the prospective member if the sequence number of the prospective member is smaller than the sequence number of the group state.

45.   (New) The at least one program storage device of claim 43, wherein the updating comprises updating the sequence number of the group state with a highest sequence number of the members of the processing group if a quorum of the processing group exists.

46.   (New) The at least one program storage device of claim 42, further comprising activating the processing group.